
Clarity Toolbox – Change Order Management Tool User Manual

Global Project Management Office

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1 INTRODUCTION

1.1 Purpose

This document sets out the method for use of the Change Order Management tools that are part of a set of tools known collectively as the 'Clarity Toolbox'. These tools support the business requirements of PSG in the management and execution of its projects. The Toolbox will support the PMO Processes in areas where a tool has been identified as needed but is not necessarily covered by core Clarity functionality.

1.2 Reference documents

Clarity User Manuals
Data Dictionary

2 CHANGE ORDER MANAGEMENT

Enterprise level financial forecasting tools are required to assist the Project Managers in the ability to develop, track and submit project change orders. These change orders include

- Changes to services
- Change to PriceBook Products and buyouts
- Changes to miscellaneous items

As a result of the above the tools will calculate and track on –

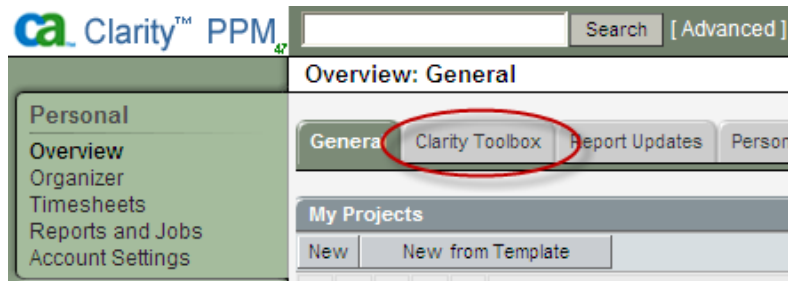
- Status
- Dates
- Values

The Clarity Toolbox tools assist the PM in development of the above, and enable the collection of location level data through standard Clarity dashboards and reports.

The toolbox leverages existing data within Clarity, including existing current financial information.

3 HOW TO ACCESS THE CLARITY TOOLBOX

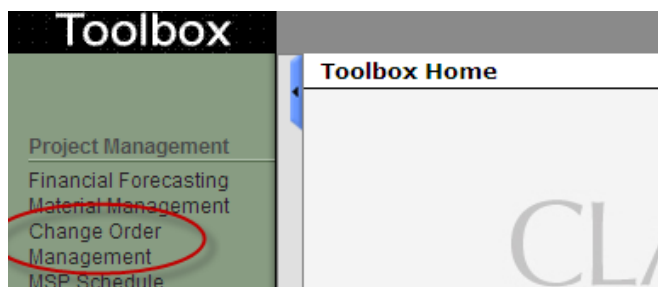
Access to the Clarity toolbox will be granted on request from the PMO Support group. It is dependent on the users' role and business needs. Once access rights have been granted an additional 'Clarity Toolbox' tab will appear on your Clarity 'Overview' screen as shown below:



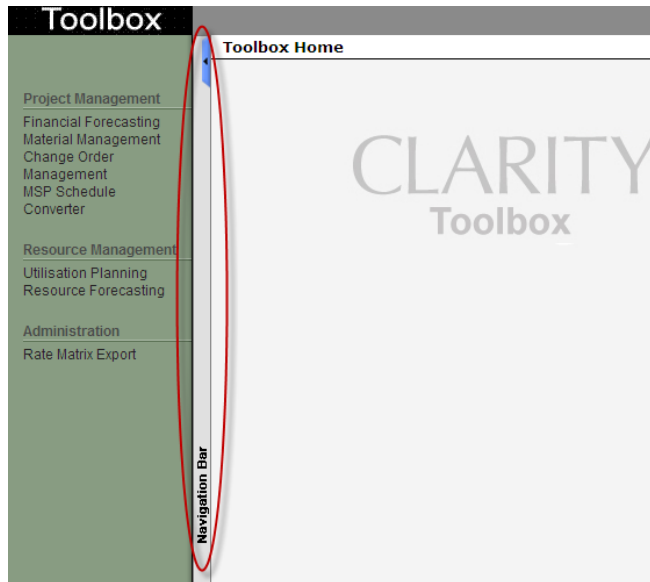
Selecting this tab will bring up the Clarity Toolbox access button (see below), click on this button to launch the toolbox. The toolbox will launch in a separate browser window, however the new window will be aware of the user's current rights and profile.



When the Toolbox launches the user will see the Toolbox home page (see below), this may list a number of tools in the left hand menu bar, depending on which tools the user has access rights to. Click on the 'Change Order Management' link to enter the Change Order Management tool. In the event that the link is not present contact PMO Support for access rights validation.



To exit the Toolbox click on the 'Logout' icon on the top right of the browser, do this as opposed to simply closing the browser window as it will automatically free up system resources.



Users may also increase the available screen width by clicking on the Navigation bar anywhere on the grey bar; this hides the left hand menu bar and so makes more of the screen available. To access the menu items, click on the Navigation bar again.

4 USING THE CHANGE ORDER MANAGEMENT TOOL

Once in the Change Order Management tool the user will see a list of projects to which he or she has added to their 'My Projects' list in Clarity. This may run to many pages so to assist in locating a specific project, so a project filter has been provided.

ID	Project Name	Active	Project Manager	ProjectType
3062361	Sipchem Jubail Acetyl Complex "Closed"		Laughter, David	T&E - MANAGED BY EMERSON
3064840	LSFB - GNE ECP1 Detail Eng GMAX - 3064840		Payjack, Donald	T&E - MANAGED BY EMERSON
3065240	MX - 3065240 - CACTUS ARECHIGA	✓	Alcantara, Ricardo	T&E - MANAGED BY EMERSON
31001315	Shell CVP Flexibles	✓	van der Loos, Ton	LUMP SUM FIXED PRICE
31001316	Shell CVP Rigids	✓	van der Loos, Ton	LUMP SUM FIXED PRICE

The Project Filter will allow filtering by project name, project ID, Project Manager or project status. Project status will be indicated by the Active parameter LOV which will include 'Yes', 'No' or 'All', where 'Yes' returns active projects, 'No' returns inactive projects, and 'All' returns all projects in the list. The default on this filter will be 'All'.


The projects displayed in the list will be from the 'My Projects' list in Clarity. This could be active or inactive projects.

The list of projects displayed will include the Project ID, Project Name, Project Manager, Project Type and Status, with an icon in the left-hand column to access the project change orders. To indicate the project's current status, a check in the row will indicate the project is active, and a blank field will indicate the project is inactive. An example project list is shown below.

ID ▲	Project Name	Active	Project Manager	ProjectType
 3062361	Sipchem Jubail Acetyl Complex *Closed*		Laughter, David	T&E - MANAGED BY EMERSON
 3064840	LSFB - GNE ECP1 Detail Eng GMAX - 3064840		Payjack, Donald	T&E - MANAGED BY EMERSON
 3065240	MX - 3065240 - CACTUS ARECHIGA		Alcantara, Ricardo	T&E - MANAGED BY EMERSON
 31001315	Shell CVP Flexibles		van der Loos, Ton	LUMP SUM FIXED PRICE
 31001316	Shell CVP Rigids		van der Loos, Ton	LUMP SUM FIXED PRICE
 3100488	3100488-LMG Cental Unit		Kowalczyk, Krzysztof	LUMP SUM FIXED PRICE
 3117656	SC - 3117656 - Ecogeneración TGS Cerri		Bugnot, Diego	LUMP SUM FIXED PRICE
 3125019	UK CE Chirag Oil Project Execution phase		Jones, Phil	LUMP SUM FIXED PRICE

If the number of projects exceeds the number that can be displayed on one page, page numbers at the bottom will enable navigation to the next page to display the next group of projects. There will be a “Total Results” and “Total Pages” display to provide additional information to the user.




The projects listed will be customer projects on the ‘My Projects’ list. If the user attempts to access a Non Customer, the request will return no records.

Use the project filter to type in the ‘Project Name’ or the ‘Project ID’. These fields will also accept ‘wild cards’ with the use of an asterisk (*). For example; type in ‘310’ in the ‘Project ID’ field, and click the Filter button. The result will filter to show all projects IDs beginning with 310. The Project Name filter works in a similar way. Access a particular project by clicking on the ‘Go’ icon  adjacent to the project. The list will also identify projects that the user has added to his or her ‘My Projects’ list in Clarity.

Note that only ‘Customer’ projects that have a financial location setup in Clarity will be displayed in the project list.

The contents of the Project Data area at the top left of the screen displays the project business system Order Values and status of change orders. The budgets displayed are dependent on the project business system.

The Message Centre area provides the user with a prompt as to what actions are required.

Toolbox




Change Order Management

Project Data: 82531104 SE - DEP/HHI/My... {LUMP SUM FIXED ...}

Business System Order Value



As Sold: KRW	4,218,928,162.00
Change Order: KRW	0.00
Revised Order: KRW	4,218,928,162.00
Approved Order: KRW	5,120,070,448.00

Change Order Management Order Value

Identified Change Orders: KRW	524,797.30
Submitted Change Orders: KRW	0.00
Approved Change Orders: KRW	0.00

Last Updated: 12/5/2012 By: Laird, Sandra



Message Centre

The current values from the business system are shown in the left side of the Project Data section. The forecasted change order values listed by change order status are summarized from the change order list below. Identified change orders over 30 days old will display the identified date in red. Submitted change order with expected approval dates in the past will display the expected approval date in red. To create a new change order, click on the  icon. To access or edit an existing change order, click on the  icon. A Change Order Document can be generated from any change order by accessing the change order and clicking on the Create Change Order Document button.

Project Completion Date : 12/12/2012

Customer Change Log

Internal Change Log

Number	Status	Description	Identified	Submitted	Updated	Cost Budget	Change Order	GP%	Schedule Impact	Expected Approval	Customer PO
 1	Identified	test change order	4/23/2012		4/23/2012	520,235.00	524,630.99	0.8	0 Weeks	5/21/2012 2012-08	
 2	Identified	test CO	8/23/2012		8/23/2012	66.53	166.31	60.0	0 Weeks	9/20/2012 2012-12	
						520,301.53	524,797.30				

4.1 Access Rights

If Read/Edit access has been granted, the user has access to all areas of COMT.

If Read only access has been granted, the user will be allowed to navigate to the project change order list, open change orders and view detail and notes. The Read only user will be allowed to generate a change order document and export customer or internal change logs.

4.1.1 Initializing the Project

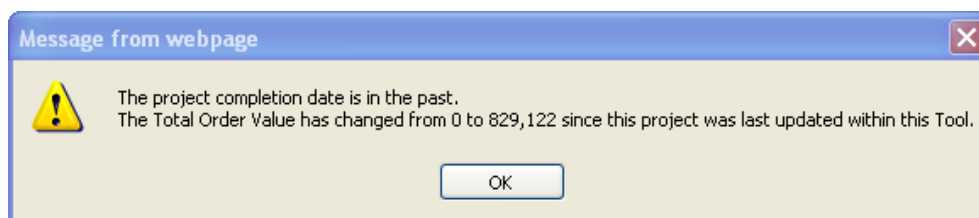
Upon initial entry to COMT, the tool will check which Business System (JDEE, JDEAP or Oracle) the project is assigned to. If not assigned to any Business System, the user will be presented with a confirmation message with the text 'This project cannot be accessed because it has not been assigned to a Business System' before being returned to the project list.

The tool will review the project 1) business system, 2) budget values entered, and 3) status.


For JDE projects the Revised Order Value will display; for Oracle projects the Approved Order Value will display. If the budgets have not been entered in the business system, a message will display that the EAC values have not been entered in the business system and returned to the project list.

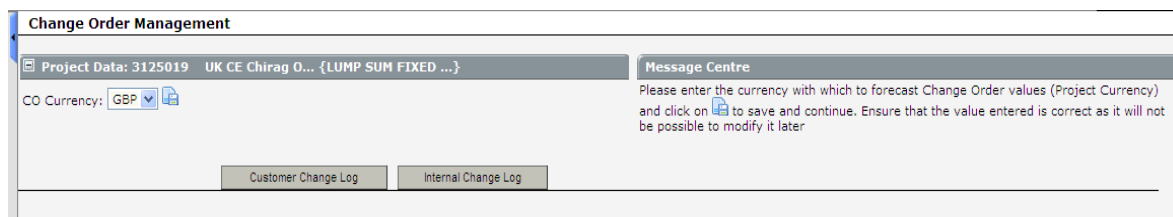
If the project is inactive, a message should display that would read '*The project is inactive. Read only access is available for this project.*' All users would have Read only access to the project to review the change orders.

The tool will determine if the project has been completed based on the completion date criteria used by FFT. If it has been completed, then the tool will display a message that would read: 'The project completion date is in the past. Please review the project in Clarity to extend the project completion date'. The user must press the 'OK' button to close the message.



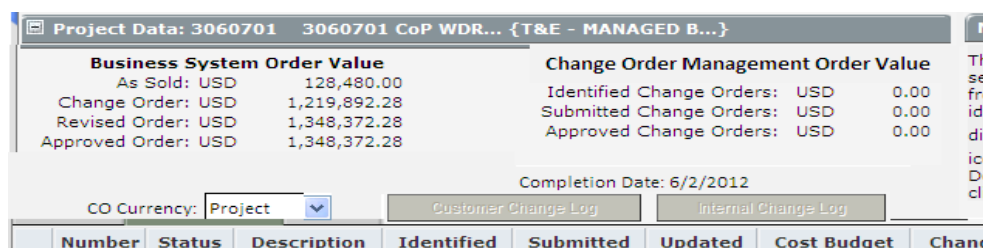
Note! If the project completion date is in the past, this will not prevent the user from entering a change order.

Upon entry into the tool, the Project Data section will display the currency filter and project completion date with a  icon. The currency filter will default to the financial location currency. Confirm or select the change order currency in this field to allow creation of change orders in the project or local (functional) currency. The currency entered is considered the 'Project' currency by the COMT. The Message Centre provides direction on the steps to initialize COMT for the project.



Upon saving the currency, the Project Data section will refresh and display the Business System Order Value for As Sold, Change Order, Revised Order and, for Oracle projects, Approved Order. The Change Order Management Order Values for the Identified, Submitted and Approved change orders will display to the right of the business system order values, which will initially be 0.00.

The change order currency filter will only display if the project currency entered is different from the local (functional) currency for the project. The currency filter LOV will be 'Project' or 'Local'. The Change Log buttons are greyed out until change orders are created.



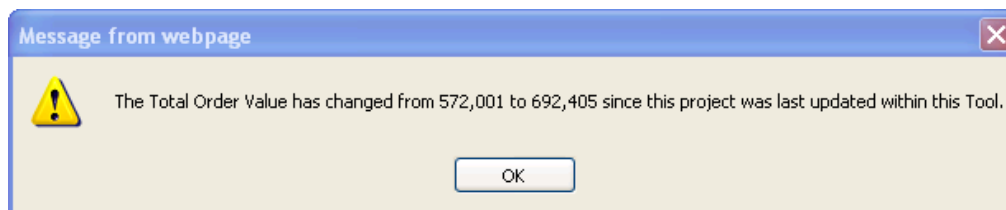
The project list section will display the project list headers with no records found. An add icon will display to create a new change order using the change order builder.

Number	Status	Description	Identified	Submitted	Updated	Cost Budget	Change Order	GP%	Schedule Impact	Expected Approval	Customer PO
No Records Found.											

Note! Any existing project change orders will be migrated to the new tool. Initialize the project by confirming or selecting the change order currency and save the value. When the tool refreshes, the existing change orders will be displayed.

4.1.2 After Project Initialization

When entering COMT for a project that has been previously initialized, the tool will display any changes to the total order value from the last time the project was accessed. An example is shown below.



The Project Data section will update with new business system values. The Change Order Management Order Value section will display the summarized values of the change orders in the change order list. If the completion date had been changed, the new completion date would display in the Project Data section.

4.2 Change Order Functionality

4.2.1 Change Order List

The tab is divided into two main areas, firstly the Project Data and Information Area at the top of the tab and a Forecasting Area for change orders including a pop-up for change order details in the Change Order Builder.

Change Order Management

Project Data: 31001315 Shell CVP Flexi... {LUMP SUM FIXED ...}

Business System Order Value

As Sold: EUR 813,604.00

Change Order: EUR 15,518.40

Revised Order: EUR 829,122.40

Approved Order: EUR 829,122.40

Change Order Management Order Value

Identified Change Orders: EUR 18,142.82

Submitted Change Orders: EUR 65,842.35

Approved Change Orders: EUR 0.00

Last Updated:11/10/2012 By:Laird, Sandra

Message Centre

The current values from the business system are shown in the left side of the Project Data section. The forecasted change order values listed by change order status are summarized from the change order list below. Identified change orders over 30 days old will display the identified date in red. Submitted change order with expected approval dates in the past will display the expected approval date in red. To create a new change order, click on the icon. To access or edit an existing change order, click on the icon. A Change Order Document can be generated from any change order by accessing the change order and clicking on the Create Change Order Document button.

Project Completion Date : 8/31/2012

Customer Change Log

Internal Change Log

Number	Status	Description	Identified	Submitted	Updated	Cost Budget	Change Order	GP%	Schedule Impact	Expected Approval	Customer PO
	1 Incorporated	Licenses	8/26/2011	9/8/2011	8/26/2011	-6,678.00	3,303.00	302.2	0 Weeks	9/8/2011 2011-12	
	2 Submitted	test	10/22/2012	10/30/2012	10/30/2012	61,706.30	65,842.35	6.3	0 Weeks	11/19/2012 2013-02	
	3 Identified	testdoc-25	10/25/2012		10/25/2012	14,586.70	18,142.82	19.6	0 Weeks	11/22/2012 2013-02	
						69,615.00	87,288.17				

In the Project Data area and Information Area, the current business system Order Values and Forecasting Tool Change Order Values are displayed to include the As Sold, Change Order, Revised and Approved (Oracle only) Order Values from the business system. Change order values are displayed with their appropriate statuses.

- As Sold is the value *in the business system*
- Change Order is the total of all project change orders *in the business system*

- Revised is the current total project order value *in the business system*
- Approved (Oracle only) is the current total project order value *in the business system*
- Identified Change Orders is the sum of all change orders in the change order list with the status 'Identified'
- Submitted Change Orders is the sum of all change orders in the change order list with the status 'Submitted'
- Approved Change Orders is the sum of all change orders in the change order list with the status 'Approved'

Any change order with the status 'Submitted' where the expected approval date is in the past will show the expected approval date in **red** text.

Any change order with the status of 'Identified', where the created date is more than 30 days old will show the created date in **red** text.

If the project has a different change order currency from the local P&L currency, the change order list can be displayed in either currency by toggling the drop down box. This will convert the display using the appropriate FX rate at the GAAP rate. Note that this box only appears if a different project currency to the P&L currency has been set up. The message only appears in the Message Centre if the Currency drop down box is displayed.

Change Order Management

Project Data: 3117656 SC - 3117656 - ... {LUMP SUM FIXED ...}

Business System Order Value

As Sold: USD	289,941.84
Change Order: USD	0.00
Revised Order: USD	289,941.84
Approved Order: USD	289,941.84



Change Order Management Order Value

Identified Change Orders: USD	21,244.93
Submitted Change Orders: USD	0.00
Approved Change Orders: USD	0.00

Last Updated: 11/13/2012 By: Laird, Sandra

Message Centre

The order value from the business system has been converted from the current value and may not be accurate.

The current values from the business system are shown in the left side of the Project Data section. The forecasted change order values listed by change order status are summarized from the change order list below. Identified change orders over 30 days old will display the identified date in red. Submitted change order with expected approval dates in the past will display the expected approval date in red. To create a new change order, click on the  icon. To access or edit an existing change order, click on the  icon. A Change Order Document can be generated from any change order by accessing the change order and clicking on the Create Change Order Document button.


CO Currency: Project Project Completion Date : 9/30/2018


Customer Change Log Internal Change Log

Number	Status	Description	Identified	Submitted	Updated	Cost Budget	Change Order	GP%	Schedule Impact	Expected Approval	Customer PO
1	Identified	Customer identified new scope	11/13/2012		11/13/2012	15,956.20	21,244.93	24.9	6 Weeks	1/4/2013 2013-04	
						15,956.20	21,244.93				

The Forecasting Area displays the Change Orders on the project including their status, description, values, impact to the project and expected approval date. The change orders are numbered sequentially by the tool. The change order list will display all change orders, regardless of status. Change orders with status Rejected and Incorporated will be displayed in the Forecasting Area but not summed in the Project Data section.

The last updated date for each change order is displayed on the row. This provides the last date the change order was updated. For an explanation of all other the fields refer to the Change Order Builder section below.

To add a new change order to the list, select the  icon and complete the data in the Change Order Builder. The change order will be saved or cancelled in the Change Order Builder popup.

To edit an existing change order, click the  icon. The tool will open the Change Order Builder, where the user can then change the data fields as required and either save or cancel as before. Change orders in Approved or Incorporated status cannot be edited. The user must return them to Identified or Submitted status to save the changes, then revert to the appropriate status.

4.2.2 Change Order Logs

The user can create a customer change log or internal change log by pressing the buttons above the COL. The customer change log includes customer pricing per change order, while the internal change log includes cost information per change order. They are in Excel format and based on the PMO templates PM-ChL-EXT and PM-ChL-INT respectively.

The tool will populate the template with the following specific items:

1. A diagonal watermark that states “Incomplete – Review before submission” to all pages in the excel document.
2. Headers on all pages will have the Clarity Project Title and Clarity project number
3. The change log pages will include values and details from the change orders detailed in the change order tab
 - a. Labor Services column includes values from the Services section of the COB
 - b. Material column includes values from the Pricebook Product and Buyouts section of the COB
 - c. Expenses and Other column includes values from the Miscellaneous section of the COB

Customer change log sample:

Change Log
PM-ChL
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Project Title : PWS SH - ZheJi
Emerson Project Number : 86

Customer Changes

Change No.	Type	Issue Date	Status	Approval Date	Description	Schedule Impact	Hours	Labour Services Price	Material Price	Expense and Other Price	Total Price	Remarks
CR1		10/11/2011	S		test 3.5 functionality	0	354	40,460.00	116,527.68	0.00	55,025.96	
CR2		10/11/2011	S		Test 3.5 functionality	0	300	0.00	82,985.92	35,000.01	41,045.37	
CR3		11/12/2011	I		Test FFT 3.5 Release 1 functionality	0	20	3,000.00	92,908.15	0.00	14,711.67	
Totals:							674	43,460.00	282,421.75	35,000.01	110,783.00	

Legend:
- Type: P = Project Change; F = Forecasted Change
- Status: I = Initiated; S = Submitted; H = Hold; R = Rejected; A = Approved; O = Order Amendment received; C = Closed
- All Prices in Project Contract Currency

Internal change log sample:

Change Log
PM-CHL
Revision A1 - 11/10/2011 - Page 3 of 3

Project Title : TAQA_IV O&A&P_G_P15
Emerson Project Number : 31001275

Internal Changes

Change No.	Type	Issue Date	Status	Approval Date	Description	Schedule Impact	Hours	Labour Services Cost	Material Cost	Expense and Other Cost	Total Cost	Remarks
CR1					Test_Customer Chnag Log		10	10	120.10	4,326.90	20,000.00	24,487.00
CR2		10/4/2011			@#%*(\$%)		0	5,500	80,456.00	374,134,763.96	0.00	93,518,376.39
CR3		10/11/2011			test new items 3.5 Release 1		16	333	13,483.94	0.00	0.00	13,453.94
Totals:							5,643	74,030.04	374,139,130.86	20,000.00	93,556,319.33	

Legend:
- Type: P = Project Change; F = Forecasted Change
- Status: R = Under Review; H = Hold; C = Cancelled; CA = Content Approved; PA = Content & Payment Approved
- All Prices in Project Contract Currency

The user should add Type and Remarks to complete the document. Since the statuses on the template used for the change logs are not aligned with the tool, this should be reviewed for accuracy.

4.2.3 Change Order Builder

A change order builder is provided to enable the user to easily construct the scope and related financial impacts of each change order. This is a relatively simple tool that enables the user to select from standard menus of items and options. The builder will also populate a Change Order template document with the data. This technique is similar to the populate document technique used to populate proposal template from EET. Change quantities can have both positive and negative values; the standard method for showing negative quantities should be used.

The builder pop up window is divided into a number of sections; a description of the fields in each section follows.

Header												
Sequence Number: 6		Totals (EUR)		Pricebook Number: 109		Customer Overview:						
Date Created: 12/2/2011		Sell: 0.00		Pricebook Effectivity Date: 12/2/2011		Pricebook Region: Netherlands						
Date Submitted:		Cost: 0.00		Schedule Impact: 0 Weeks		Internal Notes:						
Status: Identified		GP %: 0.0		Use Customer Rates: <input type="checkbox"/>		Description:						
Expected Approval: 12/30/2011		Customer PO:										
<input type="button" value="Save"/> <input type="button" value="Cancel"/> <input type="button" value="Generate Change Order Document"/>												
Services												
Item	Qty	Activity Code	Role	Location	BCEC Dep	Unit Cost (EUR)	Total Cost (EUR)	Unit List (EUR)	Disc %	Sell Price (EUR)	GP%	Cus N
No Records Found												
<input type="button" value="Add Services"/>												
PriceBook Product												
Item	Qty	Description	Part Number	Discountable	Type	Unit Cost (EUR)	Total Cost (EUR)	Unit List (EUR)	Disc %	Sell Price (EUR)	GP%	Cus N
No Records Found												
<input type="button" value="Add Pricebook Items"/>												
Buyouts												
Item	Qty	Description	Part Number	Supplier	Category	Unit Cost (EUR)	Total Cost (EUR)	Unit List (EUR)	Disc %	Sell Price (EUR)	GP%	Cus N
No Records Found												
<input type="button" value="Add Project Specific Buyout"/> <input type="button" value="Add Standard Buyout"/>												
Miscellaneous												
Item	Qty	Description	Type	Sub Type	Unit Cost (EUR)	Total Cost (EUR)	Unit List (EUR)	Disc %	Sell Price (EUR)	GP%	Cus N	
No Records Found												
<input type="button" value="Add Miscellaneous"/>												
<input type="button" value="Save"/> <input type="button" value="Cancel"/> <input type="button" value="Generate Change Order Document"/>												

4.2.4 Change Order Builder Header

In the header section the user defines general properties:

Sequence Number – Automatically generated, incremental number starting at 1 for each project and cannot be edited.

Date Created – Automatically generated based on the user's date, not the server date and cannot be edited.

Status – Drop down selection box, options are (Identified (default) / Submitted / Approved / Rejected / Incorporated). The normal sequence for approval is in this order, but the user can directly select the status Incorporated. The user is allowed to change the status of the change order which has status of Approved or Incorporated status to Rejected or Identified status. Any change order in Approved or Incorporated status cannot be changed when in that status. If changes need to be done, the user should change the status to Identified or Submitted, prior to making the change. After saving, the change order can be reverted to Approved or Incorporated status.

Date Submitted – Default is blank, this is set automatically to the current date when the status is changed to 'Submitted' and cannot be edited.

Expected Approval – Date Picker, default is 4 weeks from created date and can be edited by user. Approval date can be a past date, or a date in the future. There is no restriction on the approval date; it can be defined past the defined periods in Clarity or beyond the project completion date.

Totals Fields Sell/Cost/GP – These are the totals for the whole change order; note that total GP% is calculated based on the numeric total of all the cost and sell sections. These fields will update as lines are updated in the change order, without having to refresh the whole page.

Customer PO – This is the customer PO issued for the change order. The field is required when changing the status to Incorporated status. This allows the user to track the customer PO against individual change orders. The value displays on the COL.

Pricebook Number – Allows the user to enter the Pricebook number which will determine the price for Pricebook product and standard buyouts. The default is the current

Pricebook number. If the Pricebook number is not known, the Pricebook effectivity date can be entered and the tool will default the Pricebook number.

Pricebook Effectivity Date – The date of pricebook to be used; default is current date. If the Pricebook effectivity date is not known, the Pricebook number can be entered and the tool will default the Pricebook Effectivity date.

Pricebook Region – Dropdown selection box lists regions and is the same as the list in EET. This allows the user to select the end user location for the Sell or Price value on the project per change order. The Price Book Region will default to the same price book world area as is defined in the world area attribute, but can be changed by the user. It can be changed when the Change Order Builder is in these statuses: Identified, Submitted or Rejected; it cannot be changed when the Change Order Builder is in these statuses: Approved, Incorporated. Changing the Price Book Region on the Change Order Builder will not affect any other change orders in the Change Order List.

Schedule Impact (weeks) – Manual entry and must be numeric, integer, default is 0.

Use Customer Rates – Tick box to indicate that the services section should display rates taken from the Clarity project Customer Rates object. If no Customer Rates have been established for the project, then this box is greyed out.

Description – Free text area to describe the change order. The description is added to the Change Order Document if created using the button in the Change Order Builder. This field is a required field.

Customer Overview – Free text area to add customer overview notes. The overview is appended to the description in the Change Order Document if created using the button in the Change Order Builder.

Internal Notes – Free text area about the change order. These notes appear only in the change order.

Save Button – Clicking this saves the change order. This button is greyed out if the status is Approved or Incorporated on an existing change order.





























Cancel Button – Clicking this discards the user input and closes the change order builder, if this was a new change order then no change order is created, if it was an edit to an existing change order then all changes are lost.

Generate Change Order Document Button – Clicking this loads the data entered into specified positions in the change order template document. Prices will be loaded in the currency currently selected on screen. The simple template from the PMO website is used to create the document. This button is not enabled if there is not a single line defined within data grid.

Currency – Drop down selection box, enables the user to switch the display of the cost and prices between project and P&L currency if required. Conversion is done using the current GAAP FX rate. Note that this box only appears if a different project currency to

the P&L currency has been set up. Currency displayed in the summary and row headers is determined by this selection.

4.2.5 Change Order Builder Services Section

Services												
	Item	Qty	Activity Code	Role	Location	BCEC Dep	Unit Cost (EUR)	Total Cost (EUR)	Unit List (EUR)	Disc %	Sell Price (EUR)	GP%
	1	100	0211: User Requirement 	AO Online System Engin 	PUNE 	<input checked="" type="checkbox"/>	21.19	2,119.00	150.00	-10.00	16,500.00	87.2
	2	100	0212: Study - Evaluate 	PAS Engineer 	RIJSWIJK 	<input type="checkbox"/>	68.00	6,800.00	150.00	-10.00	16,500.00	58.8
	3	1	0213: Study - SystemAn 	PAS Engineer 	COSTA RICA 	<input type="checkbox"/>	21.19	21.19	150.00	0.00	150.00	85.9
	4	12	0213: Study - SystemAn 	PAS Engineer 	COSTA RICA 	<input checked="" type="checkbox"/>	42.38	508.56	150.00	0.00	1,800.00	71.7
	5	100	0211: User Requirement 	PAS Engineer 	PUNE 	<input type="checkbox"/>	12.01	1,201.00	150.00	0.00	15,000.00	92.0
	6	10	0210: Study - Data Gath 	PAS Engineer 	PUNE 	<input checked="" type="checkbox"/>	33.20	332.00	100.00	0.00	1,000.00	66.8
	7	10	0210: Study - Data Gath 	PAS Engineer 	PUNE 	<input checked="" type="checkbox"/>	33.20	332.00	100.00	0.00	1,000.00	66.8
								11,313.75			51,950.00	78.2

The services section allows the user to enter quantities of hours for various activities and select the associated role/location combination. If the user has opted to use a project Customer Role table then these values are available to the user. Otherwise the roles will be the default roles. On first entering the change order builder there will be a button to 'Add Services' available in the section.

Item - Item numbers are automatically assigned in sequential order.

Quantity - The user then enters the quantity of hours, which can be either positive or negative.

Activity Code - The associated Activity Code is selected from a list of Activity codes as per the Clarity Activity Code list.

Add Activity Code -- Webpage Dialog

Activity Code

Select Activity Codes:

Activity Code

ID

Filter Show All Clear

Add Close

Activity Code	ID
<input type="radio"/> 0011: Statutory (Public) Holiday	0011
<input type="radio"/> 0012: Personal Holiday / Vacation	0012
<input type="radio"/> 0013: Permitted Absence	0013
<input type="radio"/> 0014: Illness	0014
<input type="radio"/> 0015: Lieu Time	0015
<input type="radio"/> 0021: Department - Administration	0021
<input type="radio"/> 0022: Department - Procurement / Expediting	0022
<input type="radio"/> 0023: Department - Stock Control	0023
<input type="radio"/> 0025: Department - Document Control	0025
<input type="radio"/> 0026: Department - Quality	0026

Total Records : 648, Total Pages : 1 of 65 Pages.

Add Close

Example Activity Code Pop-up box

Role and Location - The Role and Location are selected from a valid list of Clarity Roles and Locations. These selection boxes are interactive, as the user starts typing then the

list of available selections will be decreased. If a role is not defined for a location, the location will not be displayed in the dropdown.

Example Role Pop-up box

Location	Location Description
ABERDEEN	Emerson processmanagement Service-Metco service
ABU DHABI	ABU dhabi Project & Service
ALKHOBAR	Emerson Arabia Inc.
ALREOD	Danaish Sales company
AO AUSTRALIA	Australia AO group
AO BRON	AO Devision- Bron group

Example Location Pop-up box

BCEC Dep – Used for adding deputation cost for BCEC locations. If a Best Cost Engineering Centre (BCEC) location is selected for a services line, the user can use the tickbox to mark whether the BCEC deputation charges should be added to the cost on the change order.

- The tickbox is only available for BCEC locations. It will be greyed out for locations that are not BCEC locations.
- When the tickbox is not checked, then the total cost is (Qty * Unit cost).
- When the tickbox is checked deputation cost is added to the cost value for the line. This value should be reflected in the Total cost for the line with the formula (Qty * Unit Cost) + (Qty * BCEC Deputation Rate for the World Area).

Unit Cost and Total Cost - Once the role and location combination is completed the relevant cost rate will be established from the Clarity matrix and the total cost calculated based on the quantity of hours. The quantity of hours or cost rate will show a red text '0', indicating to the user that this needs addressing. The total cost will calculate on a line by line basis as the lines are updated. If the cost rate should be '0', the user must confirm that the value is acceptable for a role.



If the Customer Rates check box is enabled and the option is selected (ticked) by user, the rows within the Services section will have Qty, Activity Code, Role, Location, Unit List and Disc % as editable fields. If the user selects a Customer defined role, the location field will automatically get populated along with Sell rate, which will be reflected as Unit Cost.

Unit List - Unit List is the sell rate in Effect for the Role/Location combination, this is either entered manually by the user or if the user has already opted to use the project Customer rate table, then the values are taken from there. If there is no rate present for a certain role then again a red text '0' is displayed. The user must confirm a unit list of '0' prior to saving.


Discount – Discount initially defaults to 0. The user enters the applicable discount for the line. The user can enter a negative discount to increase the sell price over 100% of list price.

Sell Price - The final line price will calculate automatically. The line sell price is calculated based on unit list less any discount %, (rounded to the nearest whole unit), multiplied by the quantity.

GP% - The GP% field is calculated based on the Total Cost and Sell Price fields.

Customer Notes and Internal Notes - The notes field will show a blank icon  if no notes are present. If notes have been added to the field, lines appear in the  icon. The customer notes are appended in the description field for the role in the Change Order Document, if it is created using the 'Generate Change Order Document' button in the Change Order Builder.

Finally, the change order totals and the services section totals will be revised in line with the line that has been added or amended. Recalculation of individual services lines cost, sell and GP% will be performed as the line fields are updated, without having to re-submit the whole form.

Clicking on the  icon will delete the entire line.

4.2.6 Price Book Products Section

The price book products section enables the user to select items out of the current platform price book and add them to the change order. The price request details are sent from the Item Pricing Service (IPS) which is the same service as used in the EET tool.

PriceBook Product														
	Item	Qty	Description	Part Number	Discount	Type	Unit Cost (GBP)	Total Cost (GBP)	Unit List (GBP)	Disc %	Sell Price (GBP)	GP%	Customer Notes	Internal Notes
	1	<input type="text" value="2"/>	Service Pack1 for v9.3	VE2301K12345	Yes	SS2V	500	1,000	1000	<input type="text" value="10"/>	232	4,8		
	2	<input type="text" value="1"/>	Service Pack2 for v9.3	VE2301R12345	No	SS2V	400	600	1200	<input type="text" value="10"/>	1000	44,0		
	3	<input type="text" value="1"/>	Service Pack3 for v9.3	VE2301K12345	Yes	SS2V	600	-400	800	<input type="text" value="10"/>	720	44,0		
							1,200				1,952	48,0		
Add Pricebook Items														

Add Pricebook Items

The user launches the Product Picker as a popup by clicking the 'Add Pricebook Items' button, then selects the Part No./Descriptions for the product from the picker (see below). This functions the same as the Product Picker in the EET solution tuning page. Multiple selections can be made each time the picker is launched. Each selection is given a separate line in the pricebook products section.

	Part Number	Description	Revision	Status
<input type="checkbox"/>	VE3001	M2 Controller	1.1/1.2	100
<input type="checkbox"/>	VE3002	M3 Controller	1.1/1.2	100
<input type="checkbox"/>	VE3003	M3 Controller	1.1/1.2	100

Example Product
Picker
Pop-up box

Item – Item numbers are automatically assigned in sequential order.


Quantity – The user must supply the line quantity for the parts selected, as either a positive or negative integer. Any quantity with a zero value will be highlighted with a dialog box and must be corrected before the item pricing request is sent. An error message is shown to “Correct lines with zero quantity before proceeding”.

Other Row Details - On returning this data the section populates most row details from the IPS. Total cost is calculated based on quantity and unit cost returned from the IPS. If the cost returned by the IPS service is '0', the user must confirm the value.

Disc% - The discount percent field enables the user to discount the list price to a selling price. The discount field initially defaults to 0. The user can enter a negative discount to increase the sell price over 100% of list price.

Sell Price – The sell price is calculated based on quantity, unit list and discount and is rounded to the nearest whole unit. If the sell price is '0', the user must confirm the value.

Customer Notes and Internal Notes - The notes fields function as per the notes field functions in EET. Customer notes will append in the description field of the Change Order Document if it is created using the button on the Change Order Builder.

Clicking on the  icon will delete the entire line.

4.2.7 Change Order Builder Buyouts Section

The Buy Outs section enables the user to select items out of the current Buy Out database from EET and adds them to the change order.

Buyouts												
Item	Qty	Description	Part Number	Supplier	Category	Unit Cost (GBP)	Total Cost (GBP)	Unit List (GBP)	Disc %	Sell Price (GBP)	GP%	Customer Notes
1	2	Additional Cable Works	ARD1234	Pc to go	Common Off the Shelf	20,000	25,000	25,000	10	22,500	11,1	
2	2	Field Mounted PC	1		Common Off the Shelf	2,500	2,500	3000	10	2,700	7,4	
2	2	Field Mounted PC	1		Common Off the Shelf	2,500	2,500	3000	10	2,700	7,4	
						30,000				27,900	24,9	
<div> Add Project Specific Buyout Add Standard Buyout </div>												

If the user clicks on the 'Add Standard Buy Out' button, this launches a popup window similar to the EET standard buy out button (see below). The user then selects the required buy out item and it is added to the list. The user will enter the quantity, either positive or negative once the items are added in the section.

Clarity Toolbox -- Webpage Dialog

Select Standard Buyouts

Supplier Description

Part Number 3rd Party Alliance Product

Product Category Product Type

Active

Filter Show All Clear

Add Add and Select More Close


	Supplier	Part Number	Description	Usage Notes	Unit Cost	Currency	Active	Product Category	Product Type
<input type="checkbox"/>	MTNAL Instruments S.V. EUR Switzerland	FST1-IS	Fieldbus Terminator IS		25.50	EUR	Yes	Network Components	SHW
<input type="checkbox"/>	MTNAL Instruments S.V. EUR Switzerland	FST1-IS	Fieldbus Terminator IS		25.50	EUR	Yes	Network Components	SHW

Add Add and Select More Close

Example Standard Buyout Pop-up box

If the user selects the Add Project Specific Buy Out then the user can manually enter the values in the presented fields for Qty, Description, Part No., Supplier Category and Cost. The tool then calculates total cost and applies a pre-defined GP to arrive at the notional list price, rounded to the nearest whole unit. The user can then discount this if required (round to nearest whole unit) and the tool calculates sell price and GP%. The user can enter a negative discount to increase the sell price over 100% of list price. If the sell price is '0', the user must confirm the value.

Each line will re-calculate automatically should the user modify the quantity or the discount.

Clicking on the  icon will delete the entire line.

4.2.8 Change Order Builder Miscellaneous Section


Item	Qty	Description	Type	Sub Type	Unit Cost (GBP)	Total Cost (GBP)	Unit List (GBP)	Disc %	Sell Price (GBP)	GP%	Customer Notes	Internal Notes
1	1	Sutable Sea Freight	Commercial Fees	Bank Guarantee	1,500	1,500	1,688	0	1,688	10,0		
2	1	Sutable Sea Freight	Commercial Fees	Bank Guarantee	3,000	3,000	3,333	0	3,333	10,0		
3	1	Sutable Sea Freight	Commercial Fees	Bank Guarantee	3,000	3,000	3,333	0	3,333	10,0		
					7,500	8,354			30,0			

Save Cancel Generate Change Order Document

The miscellaneous section enables the user to select and quantify any number of miscellaneous items. These are grouped by type and sub type according to the table below, only the defined Sub Types are available for each selected Type.

Type	Sub Type	Note
Commercial Fees	Bank Guarantees (Default) Bonds Insurance Letter of Credit Extended Warranty	
Taxes	Withholding Tax (Default) Import Duty	
Logistics	Packing (Default) Storage Shipment	
Rental	(blank)	
Translation	(blank)	
Certification	(blank)	
Risk Response	(blank)	
Customer Satisfaction Survey	(blank)	
Expenses	Hotel Accommodation (Default) Flights Hire Car Allowance	
Other	(blank)	

The user selects the appropriate Type and Sub Type from the drop down boxes and enters the relevant quantity and cost. The tool calculates a desired List Price based on a 10% GP, rounded to the nearest whole unit and then allows the user to discount this as required (answer rounded to nearest whole unit). The discount field defaults to 0 initially. The user can enter a negative discount to increase the sell price over 100% of list price. The tool will then calculate the total cost and the total price based on this and overall totals for the section. If the sell price is '0', the user must confirm the value.

Clicking on the  icon will delete the entire line.

4.2.9 Final Steps

Once all items are complete on the change order, the document can be saved. At that point, a change order document can be created for the change order, populated with the details from the change order builder by pressing the 'Create Change Order Document' button.

4.2.10 Change Order Builder Change Order Document

When the 'Create Change Order Document' button is pressed the change order builder screen, a change order document will be generated using the Change Request document template (simplified). The tool will populate the template with the following specific items.

1. A diagonal watermark that states "Incomplete – Review before submission"
2. Header will have
 - a. The Emerson Project Number from the Clarity project ID field.
 - b. The project title from the Clarity Project Title
 - c. Replace PM-ChR with CRXXX where xxx is the number of the change order.
3. Front Page will have Customer Name from the Customer field in Clarity
4. Third page will have the Description box populated with the text from the Customer Overview box
5. Fourth page will have the breakdown of price by section and total, including currency E.g. GBP 34,593. Any line level customer notes will be appended in the Description field for the line.
6. Fifth Page will have the tables populated with the details from the sections of the change order.

4.3 Change Order Tab in FFT

The Change Order tab in FFT will no longer be active with this release.

Financial Forecasting											
Project Data: 31001316 Shell CVP Rigid... {LUMP SUM FIXED ...}								Message Centre			
								Change Orders have been moved to the Change Order Management Tool in the Clarity Toolbox. This tab is under construction and will be used to manage the change order forecast from change orders entered in the Change Order Management Tool			
Invoicing	Change Orders	Costing	Sales								
Number	Status	Description	Identified	Submitted	Updated	Cost Budget	Change Order	GP%	Schedule Impact	Expected Approval	Customer PO
No Records Found											

The Project Data section will contain no information and Change Order List will display the existing column headers with a message 'No records found'.

5 REPORTING AND PROFILING

Reports and portlets are available to provide data output from the tool, these include –

- Core Clarity Portlets
- Core Clarity Reports

5.1 Clarity Portlets

The Clarity Dashboard financial portlets have been modified with a new stoplight in the Order Status portlet which compares the CO value of change orders in FFT in the 'Incorporated' status to the business system CO value.

Order Status					
[--Actions--]					
Description	Order Value	Cost Budget	Budgeted GP	%	Status
As Sold Value from EET	0	0	0	0	
As Sold Value in Oracle	1,153,802	963,590	190,212	16.5	
Change Order Value	73,438	53,621	19,817	27	
Revised Order Value	1,227,240	1,017,211	210,029	17.1	
Approved Order Value	1,227,240	967,870	259,370	21.1	
Forecasted Change Order Value	0	0	0	0	
Forecasted Total Value	1,227,240	967,870	0	21.1	
Note: All values are in EUR					
Total Results: 9					

The project change order value in the business system is compared to the change orders in 'Incorporated' status in COMT. If your location has not implemented the Financial Forecasting Tool, the stoplight will be grey.

Financial Stoplight Help				
Stoplight Help				
Stoplights	Description	Red Rule	Yellow Rule	Green Rule
Project Accounts / CO Values out of Sync	This stoplight compares the Change Order Values in the FFT with the values in the business system. Stoplight is Gray when both the Project Accounts and CO Value = 0	Calculated change order value from the business system is not equal to the Change Orders in Incorporated status in the FFT	-	Calculated change order value from the business system is equal to the Change Orders in Incorporated status in the FFT

Change Order Dashboard

The purpose of this project dashboard is to view the change orders entered for the project at the project level. This allows the PM, PA, Operations and Finance to view the change orders on a project entered in FFT, but allows no edit capability.

Values can be displayed in Project or Functional currency using a filter.

Change Order Dashboard Filter

Filter
System Default

☒ Display Currency
Functional :EUR

Filter
Save Filter
Clear

☒ = Required

The new tab can be accessed from the Project Dashboard, similar to the Financial Dashboard.

Project Dashboard: Change Orders						
Main Project Properties	Project Main Dashboard	Financial Dashboard	Change Orders	Labour Overview	Project Performance	Project Satisfaction Survey

- Contains the same information as the Change Order tab in COMT
 - Project Key Information
 - Project Change Order Stoplights
 - Contains stoplights from the Order Value portlet
 - Business System Order Value
 - Breakdown of project financial budgets from the business system
 - Forecasting Tool Change Order Value
 - Summarized by change order status
 - Project Change Order List

Main Project Properties | Project Main Dashboard | Financial Dashboard | **Change Orders** | Labour Overview | Project Performance | Project Satisfaction Survey

Project Key Information [Actions]

Project Key Information	Value
Project ID	31001316
Project Name	Shell CVP Rigids
Description	Shell CVP Provox Migration Project Rigids
Project Manager	Ton van der Loos
Lead Engineer	Eduardo Iniguez
Project Last Baseline	12 Apr 2010
EET Proposal Number	-
PATT ID	-

Total Results: 8

Project Change Order Stoplights [Actions]

Stoplights	Status
Oracle/EET As-Sold Value out of Sync	✖
Project Accounts / CO Values out of Sync	✖

Total Results: 2

Change Order Dashboard Filter [Actions]

Business System Order Value [Actions]

Description	Order Value	Cost Budget	Budgeted GP	%	Status
As Sold Value from EET	0	0	0.00	0	✖
As Sold Value in Oracle	1,153,802	963,590	190,212.00	16.5	✖
Change Order Value	86,620	74,958	11,662.00	13.5	
Revised Order Value	1,240,422	1,038,548	201,874.00	16.3	
Approved Order Value	1,240,422	1,018,411	222,011.00	17.9	
Forecasted Change Order Value	0	0	0.00	0	
Forecasted Total Value	1,240,422	1,018,411	0.00	17.9	

Note: All values are in EUR
Total Results: 9

Forecasting Tool Change Order Value [Actions]

Status	Change Order Value	Cost Budget	Change Order GP%	GP %
Submitted Change Orders	1,918,397.78	1,018,178.42	46.9	47.2
Identified Change Orders	10,654,619.13	4,625,150.48	56.6	56.9

Note: All Values are in EUR
Total Results: 4

The Project Change Order List can be filtered using two parameters:

1. By change order status
2. By update date, using a date range

Change Order List Filter [Actions]

Filter: [Select] [Collapse Filter]

Change Order Status Filter:

Update Date Filter From: to (Displays Change Orders between these dates)

Filter Show All Save Filter Clear

Change Order List [Actions]

Number	Status	Description	Identified	Submitted	Updated	Cost Budget	GP %	Change Order	Schedule Impact	Expected Approval Date	Expected Approval Period	Customer PO
1	Submitted	test as on 17/6/2012.	4/24/12	7/26/12	7/26/12	941,611	47.2	1,782,837	15 Weeks	5/22/12	2012-08	
2	Submitted	Test Change order as on 17/6/2012	6/18/12	7/26/12	7/26/12	76,567.42	43.5	135,560.78	5 Weeks	7/16/12	2012-10	ABC44
3	Identified	sdf	6/20/12		6/20/12	8,666.12	24.8	11,519.54	0 Weeks	7/27/12	2012-10	
4	Identified	Test 4	8/7/12		8/9/12	312,722.4	52.0	652,136.84	0 Weeks	9/4/12	2012-12	Test 4
5	Identified	Test1	8/9/12		8/9/12	679.71	22.3	874.89	0 Weeks	9/6/12	2012-12	
6	Identified	Test 10 Aug	8/10/12		8/10/12	4,303,082.25	56.9	9,990,087.86	0 Weeks	9/7/12	2012-12	
Note: All Values are in EUR												
Total						5,643,328.9	12,573,016.91					

5.2 Clarity Reports

There are currently no reports for the Change Orders. A country level change order report is being developed.

END OF DOCUMENT